UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/828,474	04/09/2001	Naoto Kinjo	Q63869	6764

7590 12/23/2003

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
WASHINGTON, DC 20037-3213

EXAMINER	
BLACKMAN, ANTHONY J	
ART UNIT	PAPER NUMBER
2676	9

DATE MAILED: 12/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/828,474	KINJO, NAOTO	
	Examiner	Art Unit	
	ANTHONY J BLACKMAN	2676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 April 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) *14-26* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *5*.
4) ☒ Interview Summary (PTO-413) Paper No(s). *8*.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-13, drawn to an image processing method executing a processs of forming a computer graphics image, classified in class 345, subclass 428.

II. Claim 14, drawn to an image processing system forming a computer graphics image and a downloading section for downloading the drawn images, classified in class 382, subclass 214.

III. Claims 15-22, drawn to an image processing system wherein the output image is output as print, classified in class 358, subclass 3.21.

IV. Claims 23-26, drawn to an image processing method reading and processing a hand drawn image, classified in class 382, subclass 181.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I, II, III and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, inventions I, II, III and IV has separate utility such as an image processing method executing a processs of forming a computer graphics image; an image processing system forming a computer graphics image and a downloading section for downloading the drawn images, an image processing system wherein the output image is output as print, and an image

processing method reading and processing a hand drawn image . See MPEP § 806.05(d). Applicant's election without traverse of Group I in Paper No. 8 is acknowledged.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Image Processing Method and System Using Computer Graphics to Select from a plurality of Drawing Levels.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-6 and 9-10 are rejected under 35 U.S.C. 102(e) as being anticipated by WAJIMA, US Patent No. 6,498,613.

6. As per claim 1, examiner interprets WAJIMA to teach the limitations as claimed; An image processing method utilizing computer graphics in which an image at a higher drawing level (figures 2a, 3a, 3b, 4 and 9, column 5, lines 25-column 6, line 49) is formed from a computer graphics image formed by computer graphics (figure 1, elements 1 and 6, column 3, lines 28-63) said method comprising the steps of: selecting a particular drawing level from a plurality of drawing levels set in advance for a computer graphics algorithm (figures 2a, 3a, 3b, 4 and 9, column 5, lines 25-column 6, line 49) based on at least one of an amount of computation processing , (figures 2a, 3a, 3b, 4 and 9, column 5, lines 25-column 6, line 49) an amount of data and a display resolution (the underlined feature is disclosed by WAJIMA); executing a process of forming the computer graphics image by said computer graphics algorithm at the thus selected particular drawing level (figure 1, element column 3, lines 33-42, 43-49 and 50-62, (figures 2a, 3a, 3b, 4 and 9, column 5, lines 25-column 6, line 49)) ; and Performing processing by said computer graphics algorithm at a higher drawing level than said particular drawing level which was selected from said plurality of drawing levels based on editing data in the process of forming said computer graphics image (figures 2a, 3a, 3b, 4 and 9, column 5, lines 25-column 6, line 49) at said particular drawing level or based on said editing data and attached data thereby forming image data at said higher drawing level (figures 2a, 3a, 3b, 4, elements a8 and a19, and 9, column 5, lines 25-column 6, line 49).

7. As per claim 2, examiner interprets WAJIMAS to meet limitations, of claim 1, as well as: wherein said image at the higher drawing level is an image to be printed (figure 1, element 7)or an image to be displayed (figure 1, element 6), and said image data at the higher drawing level is print image data or display image data (figure 4, elements a8 and a19, the underlined feature is chosen).

8. As per claim 3, examiner interprets WAJIMAS to meet limitations, of claim 1, as well as: wherein said image at the higher drawing level is an output image (figure 4, elements a2-a8), said image data at the higher drawing level is output image data (figure 4, elements a2-a8), and said processing by said computer graphics algorithm at the higher drawing level Is performed in a process of outputting(figure 4) .

9. As per claim 4, examiner interprets WAJIMAS to meet limitations, of claim 1, as well as; wherein when said computer graphics image is formed, said particular drawing level is selected from said plurality of drawing levels for each image component in an imaged scene or for each processing operation performed for producing a specified particular effect on said computer graphics image(figures 2a, 3a, 3b, 4 and 9, column 5, lines 25-column 6, line 49) .

10.. As per claim 5, examiner interprets WAJIMAS to meet limitations, of claim 1, as well as; wherein a plurality of computer graphics algorithms/instructions

(figures 4 and 9) are further prepared, and a particular algorithm is selected from said plurality of computer graphics algorithms based on at least one of said amount of computation processing (figures 2a, 3a, 3b, 4 and 9, column 5, lines 25-column 6, line 49, the underlined feature is chosen),

said amount of data and said display resolution, and for the thus selected particular algorithm, said particular drawing level is selected from said plurality of drawing levels(figures 2a, 3a, 3b, 4 and 9, column 5, lines 25-column 6, line 49).

11. As per claim 6, , examiner interprets WAJIMAS to meet limitations, of claim 5, as well as; wherein when said computer graphics image is formed, said particular algorithm is selected from said plurality of computer graphics algorithms for each image component in an imaged scene or for each processing operation performed for producing a specified particular effect on said computer graphics image (figures 2a, 3a, 3b, 4 and 9, column 5, lines 25-column 6, line 49 the underlined feature is chosen).

12. As per claim 9, examiner interprets WAJIMA to meet limitations of claim 1, as well as: wherein the process of forming the computer graphics image at the particular drawing level is performed in an image processor and the processing by said computer graphics algorithm at the higher drawing level is performed in the same image processor (figures 2a, 3a, 3b, 4 and 9, column 5, lines 25-column 6, line 49 the underlined feature is chosen).

13. As per claim 10, . examiner interprets WAJIMA to meet limitations of claim 9, as well as: wherein said image processor is a personal computer (figure 1 and column 1, line 28-column 2, line 4).

.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15. Claims 7-8 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over WAJIMA, US Patent No. 6,498,613 in view of BELLAMY et al, US Patent No. 4,253,146

16. As per claim 7, examiner interprets WAJIMAS to meet limitations, of claim 1, as well as;wherein the process of forming the computer graphics image at the particular drawing level is performed in a first image processor (figure 1, element 1), however, does not expressly teach different timing of a second processor, it would have been obvious to one at the time of the invention that the communication from figure line

provides for other signals. However, examiner interprets BELLAMY et al to suggest whereas the processing by said computer graphics algorithm at the higher drawing level is performed with a different timing in a second imaqe processor different from said first image processor (figure 17 , figure 19 and figure 20 , column 1, line 64-column 3, line 63, and column 60, line 41-51). It would have been obvious tone at the time of the invention to utilize the timing relationships between the global memory module (the entire abstract) and a requesting processor (column 3, lines 25-27) and timing means (figure 20) of BELLAMY et al to modify selectively higher drawing levels associated with a cabinet(figures 2, 2a and 6-8) disclose hierarchically higher drawing levels of WAJIMA because the communication line of figure 1(WAJIMA), teach utilization of other programs (column 1, lines 54-57) as disclosed with BELLAMY et al's Global Memory Module means provides hierarchical processor configurations (column 3, lines 50-63). Therefore, it would have been obvious to modify WAJIMA by BELLAMY et al.

17. As per claim 8, examiner interprets WAJIMAS to meet limitations, of claim 7, as well as;wherein, wherein said first image processor is a personal computer (figure 1, column 3, lines 29-63), however, does not expressly teach said second image processor is a host computer connected to the personal computer through a communication network. BELLAMY et al suggests said second image processor is a host computer connected to the personal computer through a communication network (column 3, lines 50-63).

18. As per claim 11, examiner interprets WAJIMAS to meet limitations, of claim 1, as well as; wherein, processing operations at different drawing level including the process of forming the computer graphics image at the particular drawing level (figures 2a, 3a, 3b, 4 and 9, column 3, line 28-column 4, line 4, column 5, lines 25-column 6, line 49 the underlined feature is chosen), however, does not expressly teach and the processing by said computer graphics algorithm at the higher drawing level are performed by sharing among a plurality of image processors interconnected through a communication network, although a communication lines are disclosed. BELLAMY et al suggests the processing by said computer graphics algorithm at the higher drawing level are performed by sharing among a plurality of image processors interconnected through a communication network (column 3, lines 50-63).

19. As per claim 12, examiner interprets WAJIMAS as modified to meet limitations of claim 11, however, does not expressly teach wherein said plurality of image processors are personal computers. However, BELLAMY et al suggest said plurality of image processors are personal computers (column 3, lines 50-63).

20. As per claim 13, examiner interprets WAJIMAS as modified to meet limitations of claim 11, as well as wherein an image processor to be selected from said plurality of image processors for performing a processing operation at each of said different drawing levels (figures 2a, 3a, 3b, 4 and 9, column 5, lines 25-column 6, line 49 the

underlined feature is chosen)., however, does not expressly teach a timing applied for performing said processing operation are set in advance to said editing data or as a processing condition. BELLAMY et al suggest a timing applied for performing said processing operation are set in advance to said editing data or as a processing condition (figure 17 , figure 19 and figure 20 , column 1, line 64-column 3, line 63, and column 60, line 41-51).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY J BLACKMAN whose telephone number is 703-305-0833. The examiner can normally be reached from Monday through Friday from 9am-5pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MATTHEW BELLA can be reached on 703-308-6829. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

ANTHONY J BLACKMAN
Examiner
Art Unit 2676

***

MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600